



**Electro-Voice®**  
a MARK IV company

**Commercial  
Microphones**

## US658L/US658H

**DYNAMIC CARDIOID  
MICROPHONE**

### SPECIFICATIONS

**Element:**

Dynamic

**Frequency Response,**

80-13,000 Hz (see Figure 1)

**Polar Pattern,**

Cardioid (see Figure 2)

**Impedance Must be Specified:**

**US658L:**

Low-Z, balanced

**US658H:**

Hi-Z, balanced

**Output Level,**

**US658L:**

-61 dB

(0 dB = mW/10 dynes/cm<sup>2</sup>)

**US658H:**

-60 dB

(0 dB = 1 volt/dyne/cm<sup>2</sup>)

**Case Material:**

Die cast zinc body with steel screens

**Finish:**

Non-reflecting blue/black

**Switch Type:**

On/off (see Figure 5)

**Dimensions,**

**Diameter:**

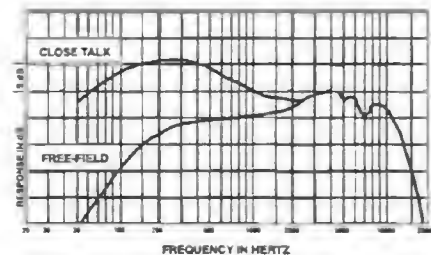
55.0 mm (2.16 in.)

**Length:**

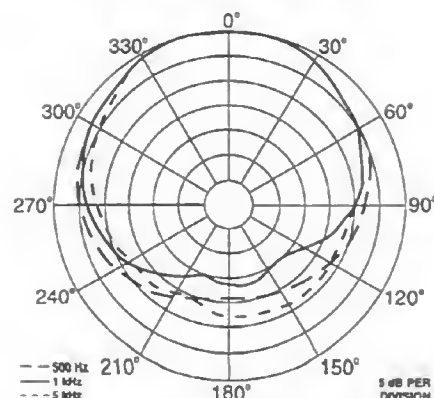
168.0 mm (6.63 in.)

**Net Weight,**

252 g (8.9 oz) excluding cable



**FIGURE 1  
Frequency Response**



**FIGURE 2  
Polar Response**



### DESCRIPTION

The US658 series combines high output level and smooth frequency response in an economical but handsomely designed product. Available in either high impedance (US658H) or low impedance (US658L), these models are single-D cardioid microphones which emphasize low frequencies in the same manner most entertainer mics do when held "close-up". A fine choice for sound reinforcement, public address and other applications where quality and price are of prime consideration. The US658 series uses the broadcast standard three-pin audio connector.

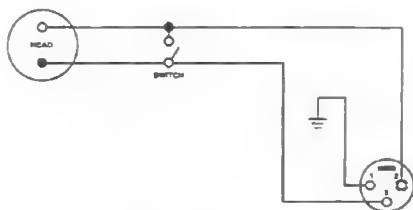
A new head design provides wide linear response for effective gain-before-feedback in sound reinforcement applications. A shock absorber isolates the transducer assembly from mechanical noises. An internal Acoustiloom™ filter allows close talking without excessive "P-popping" and prevents dirt and magnetic particles from accumulating on the diaphragm.

The Electro-Voice US658 microphone features a rugged dynamic element in a resilient internal mounting that reduces output noises due to handling and mechanical shock. The smooth wide range response and cardioid pickup pattern combine to produce excellent results in especially difficult situations where feedback is a problem. A die cast zinc case completes the rugged assembly of this economical microphone. From hand or stand, vocal, instrumental, or P.A., your US658 is built to give you years of dependable service.

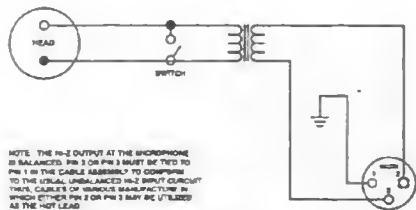
### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a cardioid dynamic type. Response shall be from 80 to 13,000 Hz, specially shaped above 1,000 Hz to maintain presence for vocal and musical pickups, and below 1,000 Hz, shall vary inversely with distance. 100 Hz response with sound source 24-inches from the microphone shall be nominally 10 dB lower than response with sound source one-quarter-inch from microphone. Response at front of microphone shall be nominally 20 dB greater than response at rear.

The microphone shall be available in high or low impedance. Output level for high impedance shall be -60 dB (0 dB = 1 volt/dyne/cm<sup>2</sup>). Output level for low impedance shall be -61 dB (0 dB = 1 mW/10 dynes/cm<sup>2</sup>). An On/Off switch shall be provided, so that transducer is "shorted" when switch is in "Off" position. Low impedance connections shall be 150 ohms balanced.



**FIGURE 3**  
Wiring Diagram  
US658L



NOTE: THE H-Z OUTPUT AT THE MICROPHONE IS BALANCED. PIN 2 OR PIN 3 MUST BE TIED TO PIN 1 IN THE CABLE ASSEMBLY TO CORRESPOND TO THE USUAL UNBALANCED H-Z INPUT CIRCUIT. THESE CABLES OF VARIOUS MANUFACTURE IN WHICH EITHER PIN 2 OR PIN 3 MAY BE UTILIZED AS THE HOT LEAD.

**FIGURE 4**  
Wiring Diagram  
US658H

The case shall be pressure-cast zinc. Dimensions shall be: 55.0 mm (2.16 in.) diameter (major), 168.0 mm (6.63 in.) long. Net weight shall be 252 g (8.9 oz). Finish shall be non-reflecting blue/black.

The Electro-Voice models US658H and US658L are specified.

#### **WARRANTY (LIMITED) —**

Electro-Voice Commercial Microphones are guaranteed for two years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to Electro-Voice. Unit will be returned prepaid. Warranty does not extend to finish, appearance items, cables, cable connectors, switches, or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice will void this guarantee. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For warranty repair and service information on Electro-Voice commercial microphone products, contact: Electro-Voice, Inc., 10500 West Reno, Oklahoma City, Oklahoma 73128 (405/324-5311 or 800/444-9516); Attention: Customer Service Department.

For technical assistance, contact the Technical Services Representative at Electro-Voice, Inc.

#### **Repair locations:**

Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107; Attention: Service Department.

Specifications subject to change without notice.